



Cape Cod Cranberry Growers' Association

GROWER ADVISORY

Groundwater Protection Regulations

The Department of Food and Agriculture (DFA)'s Groundwater Protection Regulations are intended to prevent contamination of public drinking water supply wells through regulating the application of pesticide products on the **Groundwater Protection List** (see page 3) within primary recharge areas. A primary recharge area is either an "Interim Wellhead Protection Area" or a "Zone II"

The pesticide groundwater protection regulations ONLY apply to public drinking water wells that pump greater than 100,000 gallons of water per day (gpd).

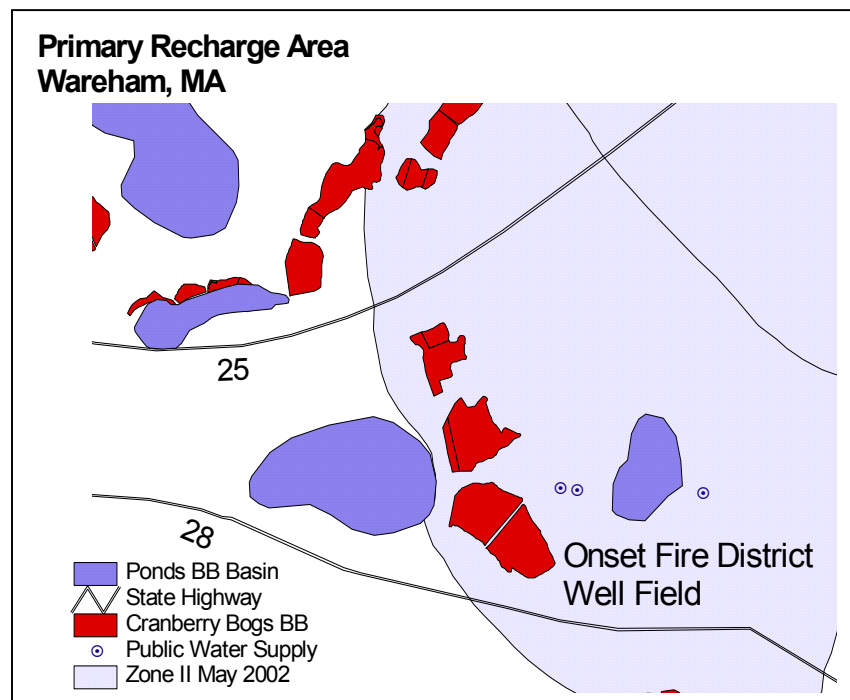
ARE YOU SUBJECT TO THESE REGULATIONS?

First determine if you are in a primary recharge area.

There are several steps, which you can follow to determine if you are operating within a primary recharge area:

Step One: First check to determine if a Zone II or IWPA is located within the town where you plan to do an application. (see page 3) If there is a primary recharge area delineated within the town, you need to determine if your bog falls within the primary recharge area.

Step Two: To determine if your cranberry bog falls within a primary recharge area you can use the following options: Contact the CCCGA office (508) 759-1041 or the Plymouth County Conservation District office (508) 295-5496 to have a Geographic Information System determination made.



Example of GIS made of Onset Fire District

EXISTING PRODUCING CRANBERRY BOGS

A. For a pesticide product which is applied to an area which has greater than 50% foliar ground cover (Most established cranberry beds meet this requirement) the applicator must ensure that:

- There is no viable alternative for the use of the pesticide on the Groundwater Protection List (Chlorothalonil), and
- The pesticide is being applied as part of an Integrated Pest Management (IPM) plan from Department approved sources
"Department approved sources" include: The current "Cranberry Chart Book " published by the University of Massachusetts Cranberry Station.

The Department does not require the submission of IPM plans for approval. Instead the applicator should maintain a copy of their IPM plan in their records. The plan should be specific to the pest problem requiring management with a pesticide on the Groundwater Protection List. The plan information should include:

- The name of the applicator
 - The location (IWPA, Zone II and property) and dates of the application
 - A problem statement which outlines the reason for using the pesticide product on the Groundwater Protection List;
 - An account of the method used by the applicator to identify the problem. (i.e. IPM scouting records or fruit rot records from prior harvest) Any laboratory diagnosis of the pest problem must also be maintained.
 - An account of the IPM measures that have been taken to manage the problem. (i.e. late water, sanding, etc..)
 - A letter or statement from the U-Mass, Cranberry Station stating that there is no viable alternative to the use of product on the Groundwater Protection List to control the particular pest problem. (see *Cranberry Station Newsletter June 2003, Frank Caruso article on Chlorothalonil alternatives*)
- The Department of Food and Agriculture is **notified** of any applications of a product on the groundwater protection list. (use notification form attached) Submit to DFA within 30 days of application.

NEW PLANTINGS

B. For a pesticide product which is soil applied or applied to an area with less than 50% foliar ground (New planting) cover the applicator must ensure that:

- there is no **viable alternative** for the use of the pesticide on the Groundwater Protection List (Chlorothalonil), and
- a **Pesticide Management Plan (PMP)** for that use pattern has been approved by the Department of Food and Agriculture. (Contact CCCGA to learn more about applying for a Pesticide Management Plan.)

Pesticide Management Plan

The regulations require that the following information is submitted as part of a Pesticide Management Plan:

- Name and EPA registration number of pesticide used
- All maps necessary to identify the anticipated use site
- Written evaluations of alternative control methods including economic ramifications
- Information on the target pest, method of application, rate of application, irrigation practices (if any), crop and the percent of ground cover.
- Storage handling and loading procedures
- The specific department approved **integrated pest management program** that has been adopted
- Site specific data – top soil horizon depth; depth to seasonal high water table; NRCS soils hydrologic group; percent organic matter soil test results; monitoring data from wells on site including a list of wells.
- Other data which supports a finding that the anticipated use site is not a highly vulnerable site
- All data must be referenced

DFA, Dept. of Environmental Protection and the Dept. of Public Health review the plan. DFA must respond within 60 days of the receipt of a completed Pesticide Management Plan. The application will be approved by the department only if the following conditions are met:

1. The anticipated use site is not a highly vulnerable site, i.e.:
 - a soil with a top soil horizon of 15 percent or less in soil organic matter
 - an area where the depth to the aquifer is less than 15 feet
 - an area where the depth to the fractured bedrock or seasonable high water table is less than four feet, and
2. There is unlikely to be an unreasonable adverse effect on the environment and
3. There is no viable alternative control method, and
4. The product has not been detected as a result of a groundwater monitoring program

Groundwater Protection List

The Groundwater Protection List refers to a list of pesticide active ingredients that could potentially impact groundwater due to their chemical characteristics and toxicological profile. There is only one active ingredient on the groundwater protection list that is currently registered for use in cranberries.

CHLOROTHALONIL	Available products include: BRAVO; SPECTRO; EQUUS; ECHO
Cranberries	Chlorothalonil is a broad-spectrum organochlorine fungicide used to control fungi.

Cranberry Growing Region Wellhead Protection List 2003

Municipalities which contain wellhead protection areas* or portions of wellhead protection areas within their boundaries (1/2003)

ACUSHNET	DARTMOUTH	HALIFAX	SANDWICH	WAREHAM
BARNSTABLE	DENNIS	HANSON	MASHPEE	WELLFLEET
BERKLEY	DUXBURY	HARWICH	MATTAPOISETT	WEST BRIDGEWATER
BOURNE	EAST BRIDGEWATER	LAKEVILLE	MIDDLEBOROUGH	PLYMOUTH
BREWSTER	EASTON	MANSFIELD	NANTUCKET	PLYMPTON
BRIDGEWATER	FAIRHAVEN	MARION	SEEKONK	RAYNHAM
CARLISLE	FALMOUTH	MARSHFIELD	SHARON	REHOBOTH
CARVER	FOXBOROUGH	NORTON	ORLEANS	ROCHESTER
CHATHAM	KINGSTON	NORWELL	TAUNTON	

For Further Information Contact

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The above information is provided by the Cape Cod Cranberry Growers' Association for the benefit of its members. The information represents our interpretation of the state requirements and by no means is intended to act as a substitute for reading and following the specific regulatory requirements.